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[Continued on next page]

(54) Title: RICE AND PRODUCTS THEREOF HAVING STARCH WITH AN INCREASED PROPORTION OF AMYLOSE

1 GCCACCGACA TCCGCCGCAA TGCTGTGTCT CACCTCCTCT TCCTCCTCCG CGCCCGCTCC 61 GCTCCTTCCC TCTCTCGCTG ATCGACCGAG CCCGGGGAATC GCGGGCGGGG GTGGCAATGT 121 TCGCCTGAGC GTGGTTTCTT CGCCGCGCCG GTCGTGGCCT GGAAAGGTCA AGACCAATTT 181 CTCAGTTCCT GCGACTGCGC GAAAAAACAA AACCATGGTG ACTGTTGTGG AGGAGGTCGA 241 CCACCTTCCT ATATATGATC TGGACCCTAA GTTGGAGGAA TTCAAGGATC ACTTCAACTA 301 TAGGATAAAA AGATACCTCG ACCAGAAATG CCTGATTGAA AAACATGAGG GGGGCCTTGA 361 AGAATTTTCT AAAGGCTATT TGAAGTTTGG GATTAATACA GTTGATGGTG CCACAATATA 421 TOGTGAATGG GCGCCTGCTG CACAAGAAGC ACAGCTCATT GGTGAGTTCA ATAACTGGAA 481 TGGTGCAAAA CACAAGATGG AGAAGGATAA ATTTGGCATT TGGTCAATCA AGATTTCACA 541 TGTCAATGGG AAGCCTGCCA TCCCTCACAA TTCCAAGGTT AAATTTCGCT TTAGGCATGG 601 GGGTGGAGCA TGGGTTGATC GTATTCCCGC ATGGATTCGT TATGCAACTT TTGATGCCTC 661 TAAATTTGGA GCTCCATATG ATGGTGTACA CTGGGATCCT CCAGCCTGTG AAAGGTACGT 721 GTTTAAGCAT CCTCGACCTC CAAAACCTGA TGCTCCACGC ATCTATGAGG CTCATGTGGG 781 GATGAGTGGT GAAGAGCCAG AAGTAAGCAC ATACAGAGAA TTTGCAGACA ATGTGTTACC 841 ACGCATACGG GCAAATAACT ACAACACAGT TCAGTTAATG GCAATCATGG AACATTCCTA 901 CTATGCTTCT TTTGGGTATC ACGTGACAAA TTTTTTCGCA GTCAGCAGCA GATCAGGAAC 961 ACCAGAGGAT CTGAAATATC TTGTTGACAA GGCACATAGT TTAGGATTAC GAGTTCTGAT 1021 GGATGITGTC CATAGCCATG CGAGTAATAA TGTGACCGAT GGTCTAAATG GCTATGACGT 1081 TGGACAAAAC ACTCATGAGT CTTATTTTCA TACAGGAGAT AGGGGCTACC ATAAACTCTG 1141 GGATAGTCGT CTGTTCAACT ATGCCAATTG GGAGGTCTTA AGATTTCTTC TTTCTAATTT 1201 GAGATATIGG ATGGACGAAT TCATGTTIGA TGGCTTCCGA TTIGATGGGG TTACATCAAT 1261 GCTATACCAT CACCATGGTA TCAATAAGGG ATTTACTGGA AACTACAAGG AGTATTTCAG 1321 TTTGGATACC GATGTGGATG CAATTGTTTA CATGATGCTC GCAAACCATT TAATGCATAA 1381 ACTCTTGCCG GAAGCAACTA TTGTTGCTGA AGATGTTTCG GGCATGCCAG TGCTTTGTCG 1441 GCCAGTTGAT GAAGGTGGAG TAGGGTTTGA CTTCCGCCTG GCAATGGCCA TTCCTGATAG 1501 ATGGATTGAC TACCTGAAGA ACAAAGAGGA CCGCAAATGG TCAATGAGTG AAATAGTGCA 1561 AACTTGACT AACAGGAGAT ATACAGAAAA ATGCATTGCC TATGCCGAGA GCCATGATCA 1621 GECCATTGTT GGTGACAAGA CTATAGCATT TCTCTTGATG GACAAGGAAA TGTACACTGG 1681 CATGICAGAC TTGCAGCCTG CTTCACCTAC CATCAACCGT GGCATTGCAC TCCAAAAGAT 1741 GATTCACTTC ATTACGATGG CCCTTGGAGG TGATGGCTAC TTAAATTTTA TGGGCAATGA 1801 GTTTGGCCAT CCAGAATGGA TTGACTTTCC AAGAGAAGGC AACAACTGGA GCTATGATAA 1861 ATGCAGACGT CAGTGGAGCC TTOTCGACAC TGATCACCTT CGATACAAGT ATATGAATGC 1921 ATTTGATCAA GCAATGAATG CACTCGAGGA GGAATTTTCC TTCCTGTCAT CATCAAAGCA 1981 GATIGITAGC GACATGAACG AGAAAGATAA GGTTATIGIC TITGAACGIG GAGATITGGT 2041 TTTTGTTTC AATTTCATC CCAACAAAAC TTACAAGGGT TACAAAGTCG GATGTGACTT 2101 GCCCGGGAAG TACAGAGTAG CTCTGGACTC TGATGCTTTG GTCTTTGGTG GCCATGGAAG 2161 AGTTGGCCAT GATGTGGATC ACTTCACGTC TCCCGAGGGA ATGCCAGGAG TACCAGAAAC 2221 AAATTTCAAC AACCGCCCTA ACTCATTCAA AGTCCTTTCC CCGCCCCGTA CCTGTGTGGC 2281 TTACTATCGC GTTGATGAAG ATCGTGAAGA GCTCAGGAGG GGTGGAGCAG TTGCTTCTGG 2341 AAAGATTGTT ACAGAGTATA TCGATGTTGA AGCAACAAGT GGGGAGACTA TCTCTGGTGG 2401 CTGGAAGGC TCCGAGAAGG ACGATTGTGG CAAGAAAGGG ATGAAGTTTG TGTTTCGGTC 2461 TTCTGACGAA GACTGCAAAT GAAGCATCAG ATTTCTFGAT CAGGAGCAAC TGTTGGTGCC 2521 CTTGTAATCT GGAGATCCTG GCTTGCCTTG GACTTGGTTG TGGTTCTFTA GCAGTTGCTA 2581 TGTACCTATC TATGATATGA ACTITATGTA TAGTTCGCCT TAAAGAAAGA ATAAGCAGTG 2641 ATGATGTGCC CTTAAACCTG AGCTGCACAA GCCTAATGTA AAAATAAAGT TTCAGGCTTT 2701 CATCCAGAAT AAAACAGCTG TTCATTTACC ATCTCAAAA

(57) Abstract: Rice having reduced levels of starch branching enzymes produce grain having a high relative amylose content in the endosperm. The rice grain of this invention can be of a non-shrunken phenotype despite a lesion in the amylopectin synthesis pathway and may be transgenic or nontransgenic.

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